

US EPA ARCHIVE DOCUMENT

2014 RSL Modelers' Workshop & Appendix W Revisions / 11th MC

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Highlights of the 2014 Regional, State, and Local Modelers' Workshop



2014 RSL Modelers' Workshop

- Held May 19–22, 2014 in Salt Lake City at the Utah DEQ Offices
 - Kudos go to the Utah Division of Air Quality for their assistance and the use of their wonderful facility.
- First day was a half-day pseudo hands on training course.
 - Preview of the soon-to-be released updated APTI 423 course.
 - Focused on the AERMET and AERMOD Special Cases modules.
- Second day was an open session for co-regulators, industry, environmental organizations, and other stakeholders.
 - Third year of the past four that we have had an open session.
 - Well received by the outside / stakeholder community.
 - Model and guidance documents status/updates for all to hear.
 - General theme of Appendix W updates with invited industry presentation.
 - ~160 participants, 24 presentation slots, 3 open session, stayed on time.



2014 RSL Modelers' Workshop

- Third and fourth days were co-regulators only.
 - Traditional RSL Modelers' Workshop format.
 - Updates from all of the federal partner agencies.
 - A full afternoon of presentations from state and locals.
 - ~90 participants with the usual fade of people on the last day.
 - A bit more flexible and relaxed on the schedule to allow for the appropriate level of discussion / engagement.
- All of the presentations from the RSL Modelers' Workshop are posted to the EPA's SCRAM website and are available via the following link:
 - <http://www.cleanairinfo.com/regionalstatelocalmodelingworkshop/archive/2014/agenda.htm>



2014 RSL Modelers' Workshop



11/03/2014

2014 Region 4 Modelers' Workshop

5




Key Highlights from the RSL Workshop

- AERMOD Modeling System (v14134) released the week before including critical updates to the ADJ_U* and ARM2 beta options.
- Guidance on PM_{2.5} Permit Modeling Guidance signed and released during the middle of the Workshop.
- The general theme of Tuesday followed planned updates for Appendix W:
 - Potential outline of a revised Appendix W reviewed.
 - IWAQM Phase 3 status update.
 - Developments with near-field dispersion modeling for primary pollutants.
 - New tools for assessing secondary formation and related issues.
 - Other issues related to 1-hour short-term standards.



Key Highlights from the RSL Workshop

- Co-regulators only discussion of Wednesday and Thursday:
 - Significant concentration gradient and NO₂ modeling clarification memorandum updates.
 - Updates from the AERMOD Implementation WorkGroup (AIWG) sub-workgroups.
 - State and local presentations on a variety of issues that have national implications.
 - Ample open/interactive forum discussion time that was more active/engaging than in the past few years.
- Aside from the time spent in the Workshop, the additional time during breaks and especially in the evenings allowed for tremendous networking, discussion of issues, and comradery.
- The 2015 RSL Modelers' Workshop will be integrated into/around the 11th Conference on Air Quality Modeling.

The background features a large, faint, circular watermark of the United States Environmental Protection Agency (EPA) seal. The seal includes the text "UNITED STATES" at the top and "ENVIRONMENTAL PROTECTION AGENCY" at the bottom, surrounding a central emblem of an eagle with wings spread.

Appendix W Revisions & 11th Conference on Air Quality Modeling



Appendix W Revisions

- Revisions throughout all portions of Appendix W based on experiences gained since the last update in 2005.
 - Clarification memorandums
 - Guidance documents
 - Model Clearinghouse actions
 - RSL Modeling Workshops
- Slight reordering / realigning of the chapters within Appendix W to more appropriately address direct and secondarily formed criteria pollutants.
 - Reference Tyler Fox's May 20th morning presentation from the 2014 RSL Modeling Workshop in Salt Lake City, UT.



Appendix W Revisions

- Consideration of all recently released beta options within AERMOD as promulgated options.
 - ADJ_U*, LOWWIND1 & 2, and ARM2
- Formulation other significant updates to the AERMOD Modeling System.
 - AERSCREEN, BLP, PRIME downwash modifications, capped/horizontal stacks, AERCOARE, OCD & shoreline dispersion, industrial heat-island consideration (AISI), MMIF...
- Significant updates with respect to the tools and techniques for assessing secondarily formed PM_{2.5} and O₃ as well as visibility, long range transport and AQRVs based on IWAQM Phase 3 efforts.



Appendix W Revisions

- Updates for other dispersion modeling applications such as mobile sources and transportation related.
- Rulemaking proposal projected for late May 2015 ahead of the 11th Conference on Air Quality Modeling.
- Final revised Appendix W publication in mid-2016.



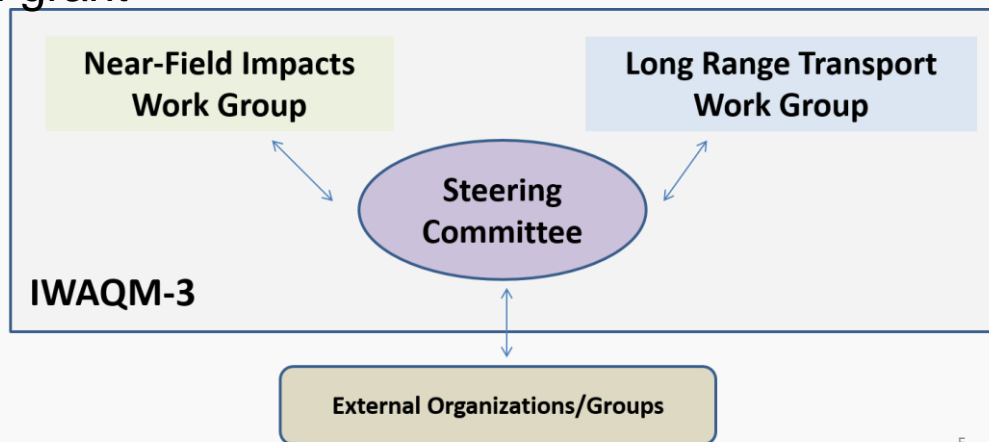
Appendix W Revisions

- Established formal working groups of OAQPS and Regional Office Modelers:
 - AERMOD Development & Evaluation (Roger Brode)
 - Screening Techniques (James Thurman)
 - NO2 Modeling (Chris Owen)
 - Near-road Modeling (Chris Owen)
 - Meteorological Inputs (James Thurman)
 - Policy & Technical Workgroup (George Bridgers)
 - IWAQM Phase 3: Near field impacts & Long-range transport (EPA and FLMs)



IWAQM Phase 3

- IWAQM (phase 3) initiated in July 2013 to provide a mechanism for updating Appendix W and related guidance documents in partnership with the Regional offices and other Federal Agencies (short term)
 - Increase knowledge regarding NSR/PSD program and single source secondary impacts
 - Understand and evaluate modeling techniques for single source secondary impacts for O₃ and secondary PM_{2.5}
 - Products from the IWAQM3 process intended to inform and support regulatory revisions to Appendix W in response to Sierra Club petition grant





IWAQM Phase 3 Participants

Near-Field impacts working group

Kirk Baker, OAQPS (Chair)
Jim Kelly, OAQPS
George Bridgers, OAQPS
Andy Hawkins, Region 7
Randy Robinson, Region 5
Jaime Wagner, Region 5
Rebecca Matichuk, Region 8
Bob Kotchenruther, Region 10
Richard Monteith, Region 4
Rynda Kay, Region 9

Long range transport working group

Bret Anderson, US FS (Chair)
Tim Allen, US F&W
Mike Barna, US NPS
John Notar, US NPS
Craig Nicholls, BLM
Kirk Baker, US EPA OAQPS
Chris Owen, US EPA OAQPS
Gail Tonnesen, US EPA Region 8
Michael Feldman, US EPA Region 6
Rick Gilliam, US EPA Region 4

Steering Committee

Tyler Fox, US EPA OAQPS
Bret Anderson, US FS
Tim Allen, US F&W
Annamaria Coulter, Region 2
Erik Snyder, Region 6
Robert Elleman, Region 10
Carol Bohnenkamp, Region 9
John Vimont, US NPS
Craig Nicholls, BLM
Val Garcia, US EPA ORD
Shawn Roselle, US EPA ORD



11th Conference on Air Quality Modeling

- The 11th MC will serve as the public hearing for the proposed Appendix W revisions rulemaking.
- The conference will be formally announced through publication in the Federal Register.
- Summary of Comments and Response to Comments documents will follow the 11th MC.
- Tentatively looking at June 10th and 11th, 2015 at the EPA Campus in RTP, NC.
- Also tentatively holding June 8th and 9th as possible dates for an abbreviated 2015 RSL Workshop also at the EPA Campus in RTP, NC.



Discussion & Questions?